

Challenger Session Comments
November 30, 1999
Breakout Session Flip Chart Transcriptions

SAFETY AND SECURITY

ROUND 1: WHAT'S GOING WELL?

Table 1:

- No major incidents. At first glance, the system is working.
- Reusable Launch Vehicles (RLVs) – and the attitude of AST, balancing safety and promotion, is positive, though no results yet.
- The Commercial Aviation Safety Team (CAST) and PICS have worked well as partnerships.
- The Office of Commercial Space Transportation (AST) is working well to balance progress and safety.
- AST recognizes issues.
- Formation of the Commercial Space Transportation Advisory Committee (COMSTAC) was a positive way to get industry input.
- STA – useful to get industry input.
- SCIPT contract was a major accomplishment.
- **KEY ITEM:** Industry and agency partnerships are working well – COMSTAC, CAST, and PICS.
- **KEY ITEM:** AST is working well to balance industry progress and safety.

Table 2:

- Global Aviation Information Network (GAIN) program
- Good control over the system.
- FOQA – positive aspects.
- Harmonization with PASST.
- International dialog
- Systems thinking, system safety, and ATOS.
- Government/industry cooperation – CAST, Joint Safety Analysis Teams (JSAT), Joint Safety Implementation Teams (JSIT).
- “Transparent” improvement in security (transparent to passengers).
- Increased emphasis on safety risk assessment.

- Increased positive relationship between FAA and airlines.
- Constructive approach to oversight.
- **KEY ITEM:** The concept of government-industry labor partnership
- **KEY ITEM:** Good control over the system, safety and operations.

Table 3 (Space):

- Progress toward commercial space licensing and regulation.
- Communication with the agency.
- Anticipating and openness for implementation of regulation and future requirements (space debris, secure communications, and a concept of operations).
- Acceptance of criticism.
- Availability of agency personnel who are motivated.
- **KEY ITEM:** Partnering with the industry, and openness to communication.
- **KEY ITEM:** Staying current on developing regulations and anticipating future needs.

Table 4:

- ECOS training (cargo loading and equipment) – involved industry to set requirements and expectations.
- CAST program/Safer Skies – industry/government/airline collaboration and partnership
- New England Region’s relationship with industry is very efficient.
- ATOS is a good example of FAA/industry partnership.
- Airworthiness program for converted cargo airplanes – good interchange with FAA. Agreed on methodology.
- SIOA/PRM S.F.: Development of process and equipment acquisition. A good example of FAA support.
- NEXCOM is another example of FAA’s attempt to involve industry at “front end” of new programs.
- **KEY ITEMS:** Partnership and industry/FAA collaboration.

Table 5:

- **KEY ITEM:** Certification of aircraft engine designs and the Systems Advisory Circular, because of an adequate, stable team.
- Continued airworthiness for turbine engines.
- Harmonization related to certification. FAR Parts 27 and 29 – Helicopters.

- JSIT and CAST: Examples of government/industry partnerships. Safer Skies is another.
- The Flight Information Services Program that provides weather information to pilots in the cockpit display.
- Y2K and FAA's preparation for it.
- The Flight Services Summit Meeting.
- Completion of FAA's senior management team.
- Attitudes toward confidential reporting – non-punitive reporting – by senior management.
- **KEY ITEM:** Certification process for turbine engines is going well because of stable, competent team within FAA.
- **KEY ITEM:** Government/industry partnership, for example, Safer Skies, JSIT, CAST.

Table 6:

- **KEY ITEM:** CAST/Safer Skies.
- ARFF – training and facilitation.
- Better understanding of the industry and the fact that one size does not fit all.
- Security staff: Better understanding of cargo issues.
- Better support of ICAO's oversight review of foreign government regulations.
- Increased passenger awareness/security issues.
- ATOS – improved approach (systematic overview).
- Executive communications: Improved communications, especially NASA/FAA.
- Y2K Program.
- **KEY ITEM:** Better and increased listening and communication – partnership and data sharing.

Table 7:

- Favorable safety record.
- CAST/GAJSC have been beneficial.
- Y2K.
- NASA partnership with FAA in safety research.
- Administrator has taken on high priority issues, and has not taken on too much.
- The rulemaking on the Enhanced Ground Proximity Warning System.
- Funding for the General Aviation Safety Program.

- DSR Rehost Computer Systems.
- FAA's compliance with NTSB's recommendations.
- FAA Airport Division's openness to consultant's input on airport design criteria.
- Increased funding for safety.
- **KEY ITEM:** Aggressive approach to government/industry partnerships (CAST/GAJSC/NASA/ARAC)
- **KEY ITEM:** Y2K.

Round Summary of Key Theme Comments (On Flip Chart):

- Industry/agency partnership – COMSTAC, CAST, PICS, etc.
- The concept of government/industry/labor partnership.
- AST openness, communication, and willingness to work with industry.
- Partnership activities.
- FAA has completed putting together a good, strong management team, which has led to improvements in areas such as certification and airworthiness.
- Y2K preparation has been a success.
- Increased listening and communication by FAA.
- Taking an aggressive approach to government/industry partnership.
- AST working well to balance industry progress and safety.
- Good (day-to-day) control over system safety and operations.
- Anticipation of future requirements and working in partnership with industry (commercial space).
- Partnerships such as Safer Skies – things are beginning to move.
- CAST and Safer Skies are great examples of partnership.
- Y2K.

Round Summary of Key Themes – Computer Notes:

- Healthy industry/agency partnership. COMSTAC, ARAC, Partnership for In-Cabin Safety. Safer Skies. CAST. GA Coalition. A host of examples. (7)
- AST is doing well balancing industry promotion and safety.
- Systems thinking – e.g., ATOS.
- Good day-to-day control over the system. Transparent security.
- Increasing emphasis on safety risk assessment.

- Anticipation of future organization requirements and willing to work with industry on new regulations that facilitate space-related growth.
- FAA has completed its senior management team and has a good team in place. Where people have been in place for awhile, there has been progress
- Good senior management attitude toward information protection and confidentiality.
- Increased communication – information and listening. (2)
- ATOS is a partnership success.
- Y2K

ROUND 2: WHAT'S NOT WORKING?

Table 1:

- Need to communicate strategy plan for SEC.
- Apply same idea component to system approach.
- (ROV's) Industry's concern of FAA's approach to risk analysis.
- AST needs more people with technical expertise in space to support infant industry.
- There has been lots of dialogue but not much effect.
- Security inspectors at screening point are low quality.
- To many carry on bags permitted–diminishing safety.
- AST under funded, under manned, and under recognized. Skills mismatch-no plan to "Get there from here."
- Goal of "No incidents" does not support industry. Could reach goal by eliminating industry.

Table 2:

- Tendency toward "Criminalization" in the industry.
- Case backlog-enforcement cases
- Aviation Safety Action Program (ASAP)
- Inadequate "Business orientation" toward airlines (timely response to problems). "Just Do It!"
- Unilateral implementation by the FAA.
- Media portrayal of the FAA as "Bureaucrats."
- Lack of credibility with Congress, the media, and industry.
- Identify the problem and "just do it."

Table 3:

- Space as a Transportation System
 - Lack of DOT recognition of space launch as a transportation system.
 - Lack of consolidated interagency
 - Safety requirements
 - Assets
 - Range
 - Downrange
 - Space
 - Resources too limited to deal with emerging commercial industry
- Accident investigation progress communication to industry should be “Better.”
- Architectural studies for spaceports, space assets, downrange assets, etc

Table 4:

- ASAP – immunity document DeLeray behind plan (others also behind plan).
- CMO’s ⁻¹ system ⁻¹ less than effective (necessary to support customers).
 - To “personality driven”
- Inconsistent training and standards.
- 727AD (misinterpretation of AS3610) and center of gravity +/- issue ill-defined issue.
- No efficient “appeal mechanism” to local inspectors findings.
- No “industry wide” standards – inconsistent interpretations.
- NAS modernization too slow implementation too disruptive.
- Partnerships not effective and wide spread as necessary to transition to next millennium.
- No multiyear budget for NAS “modernization” – impacting implementation.
- Low level staff not accountable – “Do what they want regardless of upper management decision.”
- Harmonization A/C and management certification.
 - Too much independence at local levels (lack of accountability).
 - No efficient appeal process.
 - ASAP – “More non-punitive repository system supported by FAA.”

Table 5:

- Implementation of Cost Accounting System.
- Non-implementation of Personnel Reform.
- Separating part 135 from part 121 on Flight and Duty Time Policy.
- Inadequate certification resources

- B/C of unplanned reduction in-force
- B/C of hiring freeze
- FAA funding!
- Diminishing benefits of harmonization for licensing and operations and maintenance.
- Harmonization funds
- Rulemaking delay and inadequate products/final rules.
- Disconnect/misunderstanding between NPRM and final rule. Even 1 word change makes a difference.
- Delay in moving research programs to operational status.
- Pulling back in international efforts, due to resource/funding problem.
- Y2K readiness survey – communicator
- Confidential reporting not being implemented at lower levels of FAA.
- Lack of understanding of industry issues/concerns.
- Top level policies not being trickled down to staff levels.
- Fixing what is not broken
 - takes time, effort and money
 - An example is the CQ offset issue in cargo conversion ADs.
 - Advisory circular re-writes.

Table 6:

- Lack of consistency in carry-on bag regulations.
- Inability to reach final decision.
- Need better understanding of impact of security regulations.
- ARAC
 - More balanced representation of different interest groups
 - Open meetings (issues group)
 - Better adherence to authority – too much overstepping.
 - Should reach out/coordinate more to foreign governments/FAA should work “better” with international authorities, other USG agencies (including other DOT agencies).
 - Protection of voluntary safety information.
 - Interpretive rule/clearance read-back (harms rather than improves).
 - Need to improve communication with DOJ re passenger issues.
 - Need to fix (implementation issues) problems associated with capacity enhancement programs (LAHSO, PRM).
 - Earlier industry inclusion in security initiative process (airports and carriers).
 - Lack of attention to flight attendant issues/occupational safety.
- Security

- Earlier industry involvement
- Better understanding of impact of security regulations
- Better communication with foreign governments/U.S. agencies
- Safety
 - Interpretive rule
 - Protection of voluntary safety information
 - Capacity enhancement issues
 - Improve implementation
- More diverse ARAC participation.

Table 7:

- Lack of airport capacity
- Lack of success (runway incursion/technology) (AMASS).
- ATOS (lack of success) (oversight).
- Lack of inconsistent funding.
- Increase ATC decays
- Demoralized workforce (e.g., joining union).
- WAAS/GPS
- Oceanic modernization
- Inadequate aircraft maintenance oversight and regulation (145 – repair station carriers).
- Rulemaking is long and cumbersome
 - Advisory circular; FARS
 - Certification
- Acquisition Reform: There are still cumbersome procurement practices
- Focus on long term vision
 - GPS
 - Airport system
 - E.g., application technology
- Resource support for commercial space industry is insufficient (funds, technical expertise).
- Industry concerned about agency approach to risk analysis.
- Recognize space as transportation system
 - Lack of resources
 - Lack of leadership
 - Lack of safety requirements
 - Lack of assets
- Too much independence at lower levels

- Minimum accountability
- No consistency
- No standards
- ACSEP
 - Non-retribution
 - Not in writing
- Fixing problems not broken
 - Harmonization in endless meetings
- Safety
 - Interpretive rule pilot
 - How FAA goes about making decisions
 - Rulemaking vs Assess
- NPRM on Land and Hold Safe Operations (LAHSO) defined and out on street.
- Accident investigations holding up the next launch.
- No efficient appeal process.
- Personnel reform, cost accounting has not been implemented.
- Resources, funding – inadequate to do what needs to be done in certification.
- Security
 - Earlier industry involvement
 - Better understanding of impact.
 - Better communication.
- Lack of implementation of key safety programs, e.g., AMASS, runway incursion.
- Resource support for commercial space industry is insufficient (funding, technical expertise).
- Identify the problem and “just do it.”
- Aviation rulemaking process.
- Lack of airport capacity
 - Industry concerned about agency approach to risk analysis.
 - Credibility of FAA with Congress, the media, and industry

Round Summary of Key Themes – Computer Notes:

- Need to recognize space as a transportation system on a par with other transportation modes.
- Need the resources to transition commercial space from R&D to a transportation mode and to develop an overall architecture to take advantage of commercial space capabilities.
- Accident investigations at times have held up future launches too long.

- Too much independence at lower levels (e.g., inspectors), resulting in lack of consistency and standards.
- No efficient appeal process.
- ASAP – nonretribution – inability of FAA to come forward with procedure that implements that policy. Documentation of it.
- Personnel reform, cost accounting not yet implemented.
- Certification – tendency to fix problems that aren't broken.
- Resources (lack of) to do certification and other tasks.
- Harmonization, endless meetings absorb industry time and resources.
- Nonpunitive is strong at the top of FAA but not getting down to the bottom levels.
- Security – FAA needs to obtain earlier industry involvement in regulations, more consideration of industry impacts.
- Safety – interpretive rule that affects the bond between pilots and controllers on communications.
- We do need protection of voluntary safety information.
- Capacity enhancement issues – PRM, LAHSO – need to get on the street.
- Lack of implementing key safety programs – AMASS, runway incursion program, WAAS.
- Aviation rulemaking process slow, including Part 145 oversight.
- Lack of airport capacity.
- Lack of funding underlies a lot of this.
- FAA employee morale going down rapidly as demonstrated by the move toward unionization. Something is wrong there.
- Resources for commercial space function – dollars and people.
- Industry is concerned about agency approach to risk analysis – assumptions regarding probability of failure.
- Identify the problem and just do it. Things not implemented.
- Credibility of FAA needs to be enhanced, both internal morale and external credibility.

ROUND 3: LOOKING AHEAD (Key Priorities):

Table 1:

- Increase system capacity to increase the safety margin
 - New airports
 - 3rd Chicago airport

- De politicize system
- De politicize the system to get resources for FAA - leadership from the administration.
- Streamline the decisionmaking process - let administrator take the lead
- Administrator can reallocate resources within the FAA
- Create plan for regulated space transportation system
- Improve sustainment of existing systems - don't replace with newest, shiniest system
- Increase representation on cast - include flight attendants
- Increase emphasis on RLV operations and maintenance
- **KEY ITEM:** Increase airport capacity and de-politicize the decisionmaking process
- **KEY ITEM:** Develop the plan for a regulated space transportation system and provide resources to execute the plan

Table 2:

- Implement "Part 66" ASAP
- Streamline the rulemaking process, and other internal processes
- Nationwide interpretation of rule, policies
- Implement a timely appeal process - (Enforcement and policy decisions and interpretations)
- Harmonization of all aspects (rules, procedures, policies, standards, strategy, safety standards)
- Accept the harmonization of the JAA member airlines repair stations, etc.
- **KEY ITEM:** True global harmonization (get over it and accept it) 3,5,6.
- **KEY ITEM:** Streamline the "process" in line with comments 1,2, and 4 above

Table 3:

- Consolidation of disparate requirements, processes, and procedures into "one-stop shop" at FAA/AST drawing on resources and expertise from other FAA LOBs, other (non-FAA) agencies
- Again, FAA to put more resources into commercial space
- Industry wants range flexibility, but without the proposed increase in cost
- FAA to champion interagency support
- Consolidation of "range" requirements in FAA/AST golden nugget
- Introduce real-time telemetry concept into commercial and general aviation
 - Continuous recording of cockpit voice, aircraft performance, weather, etc., etc., etc.

- Telemetered in real time via satellite to ground
- Introduce payload and security as a discipline
- FAA/DOT to give more "promotional" effort for commercial space
- Development of aerospace personnel regulations
- Treat space launch as transportation industry
 - Standardized rules
 - Go beyond current ELV licensing
 - Manufacture, ops, mx cert.
 - Promote industry
- Dedicate required resources

Table 4:

- Execution (develop/implement processes/metrics)
- Implement "Safer Skies" intervention
- Focus on "what" not "how" (focus on process with same energy as end result)
- Improve morale
- Improve credibility with Congress - (increased funding)
- ULD industry standard
- Measurable milestones and accountability
- "Do what they say they're going to do when they say they're going to do it"
- Increase urgency and focused execution on ATS/NAS modernization
- Partnership message--drive "down"
- Appeal process
- Non-reprisal data collection
- Consistent organizational comm. & concurrence
- **KEY ITEM:** Performance execution - coordinated planning (FOQA, ASAP ATM, CAST....)
- **KEY ITEM:** Milestones and accountability
- **KEY ITEM:** Efficient appeal process

Table 5:

"Reality check" before rule!

- Open exchange between high levels of FAA and high levels within industry/ Assn's at the start of rulemaking or policy changes.
- Common standard within the single level of safety theme within similar operations
- FAA should take the lead in setting international safety standard

- Harmonization within ICAO
- ICAO should play a larger role as standard-setting body
- Implementation of Safer Skies - including reprioritization of resource allocations to meet safety goals.
- Cost account system before user fee proposals
- Capstoned ADS-B implementation and certification
- Better job of identifying extraneous issues that would be better suited outside FAA
- Accelerate operational approval of new weather/hazard warning products.

Table 6:

- Review/balance interests of ARAC membership (greater labor participation)
- FOQA/ASAP - collection and protection of confidential safety data
- Focus on cabin safety/health
- Visualize aviation system including funding sources in 2010
--- work backwards (help focus NASA's R&D efforts)
- Comprehensive plan to address capacity constraints
- Better define agency's role: Advocate/ vs. enforcer partnership
- Encourage agency to look for stable, long-term funding sources for critical programs

Table 7:

- Longer-term vision:
 - Lengthen Strategic Plan
 - Integrate plans of other government agencies, but don't neglect short term
 - Drop AMASS - go to alternates: e.g., drop bars, ADS-B (GPS), etc. will also increase apt. capacity
 - Increase Railway and airport capacity to support airside
 - Implement Safer Skies"
 - Programs to communicate with employees b low management (morale & programmatic) (ASAP) (human factors training)
 - Early implementation of Technologies:
 - Streamline Certification and Procurement process
 - Rulemaking (AMASS)
- Implement agencywide continuous implementation programs - don't wait for problems
- ASAP - Self disclose/immunity safety reporting
- Human factors training (CRM for mechanics)

Round Summary of Key Theme Comments (On Flip Chart):

- Before we focus on an area, get consensus of industry on importance

- Why is -
 - Space under FAA
 - FAA working on noise policy
 - Fiddling with weather instead of researching
- FOQA/ASAP
 - Focus on cabin safety/health
- Encouraging FAA to look for stable, long-term funding sources for critical PGMS
- Human factor training
- Increase airport capacity and de politicize decisionmaking process
- True global harmonization
- Timely appeal process
- Space launch as trans industry
 - Standardize Rules
 - Go beyond current ELV licensing
 - Manufacture ops ma certification
 - Promote industry
- Performance execution in line with planning, milestones
- Standardization of safety levels - FAA take the lead to get ICAO to develop standard
- Implement those things been working on for long time
- Visualize overall aviation system in 2010 - backwards.
- PR external program and internal communication
- Cohesive integrated plan for regulated space transportation system
- Streamline the process both internal (rulemaking) and external w/industry.
- Dedicate required resources (also cross-utilization)
- More efficient appeal process
- Milestones and accountability

Round Summary of Key Themes – Computer Notes:

- “Spinning of wheels on the non-important”. Need to get consensus with industry on the problem first.
- Standardization of safety efforts around the world. Treating code share partners the same, different government treating airlines the same. FAA should stimulate ICAO to set common standards.
- Why is FAA in many areas (e.g., commercial space, noise policy)?
- Implement things, not just research them.

- FOQA – still a good deal to be done on safety and sharing of data.
- FAA needs to get all the stakeholders together and look at the likely system 10 years hence and plan for it.
- Need stable funding for the long term.
- Program for FAA to communicate with one another – both PR with outside, internal communications, for programmatic issues, some human factors training, protection for people with bad news.
- Early implementation of technology to streamline certification processes.
- Coming to industry prior to releasing regs, ACs to get them right early.
- Increase airport capacity and depoliticize the decision making process.
- Need cohesive plan to regulate commercial space and to carry it out.
- True global harmonization is needed. Both FAA nationwide and global harmonization.
- Streamline the process – internal FAA rulemaking, external.
- Faster enforcement and appeal.
- Space launch as a transportation industry – standardized rules, go beyond ELV licensing. Includes manufacture and maintenance. Commercial space needs to learn from the aviation industry and apply it. Promoting commercial space is part of that, so it matures as an industry. Dedicate the required resources; cross-utilization of aviation, space resources.
- Performance execution – planning and accountability.

ROUND 4: WHAT ARE THE THEMES?

Table 1:

- Need coherent comprehensive RLV implementation plan
- Increase system capacity
- Infuse more technology into safety and security - can lead to improved system performance
- Increase resources and skill mix
- Industry can help implement the plan
- Don't work in a vacuum - consult with industry and listen to what they have to say

Table 2:

- Harmonization and standardization
- Concentrate on streamlining and efficient implementation

- Partnerships between government, industry, labor.

Table 3:

- FAA should be renamed the Federal Aerospace Administration
- Increased, stable, integrated resources for AST
 - Allocate commensurate resources with Space as a transportation system and industry
- Development of overarching requirements (space related)
 - Consolidation of safety requirements
 - Requirements for assets (space, range, etc.)
 - Government/industry partnering

Table 4:

- Uniform Administration: One Standard, One Policy
 - Efficient Appeal System
- Operational Accountability
 - Encompassing user's needs and desired results
 - Developmental programs
 - Execution (efficiency and timeliness)
- Partnerships
 - Voluntary reporting without fear of reprisal
 - Driven down through the organization

Table 5:

- Coordination of all levels of management to achieve Agency goals
 - Prioritize resources to meet safety goals
- Safety through timely application of new certification technology
- Make government/Industry partnerships effective
 - Listen to industry
 - Harmonize through ICAO
 - Implement Recommendations
 - Safer Skies - international partnerships
 - Provide adequate resources

Table 6:

- More communication/partnerships
 - Industry
 - Stakeholders partnerships
 - International
 - Other U.S. Government Agencies
 - ARAC representation
- Long-term view - "Think Ahead"

- Resources
- Priorities
- Stable funding

Table 7:

- Current certification/procurement procedures process is a hindrance to safety
 - Delegation
 - Oversight
- Greater airport capacity will enhance safety
 - Improvement
 - Expansion

Round Summary of Key Theme Comments (On Flip Chart):

- Current certification/procurement procedures process is a hindrance to safety
 - Delegation
 - Oversight
- Need coherent comprehensive RLV implementation plan
- Message: Industry will help
- Harmonization, Standardization, Industry wants to work together
- Rename FAA the Federal Aerospace Administration
- Develop overarching requirements
- Greater international participation
- Airport safety and capacity improvements and expansion
- Increase resources and skill mix
- Work with industry - not in a vacuum
- Concentrate on streamlining and efficient implementation
- Allocate right number of resources on space
- Increase partnership structures at all levels
- Coordination of management
- Longer-term views/think ahead
- More communication and partnership

Round Summary of Key Themes – Computer Notes:

- Current certification, procurement processes more of a hindrance than a help. More delegation.
- Airport safety and capacity improvements – capacity improvements will improve the margin of safety. Funding will help.

- Need coherent, comprehensive implementation plan, recognition that RLVs are not ELVs.
- Increase resources and skill mix for commercial space
- Industry is more than willing to help; don't work in a vacuum, continue to work with industry.
- Concentrate on streamlining implementation.
- Partnership and working together.
- Federal AEROSPACE Administration. (Recognize commercial space.)
- Resources for AST and the commercial space function. Space architecture, integration, partnerships, asset consolidation.
- Uniform administration for communication standards, etc.
- Increase the partnership structure.
- Harmonization and standardization, especially internationally and in cooperation with industry. (Several)
- More communication, better partnerships, more international outreach, more partnership with other agencies.
- Has to be a longer term view.